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ABSTRACT

The purpose of this study was to determine and report the impact of high school agricultural education upon the occupational success of 1974 graduates in Virginia and compare this data with nine other Southern states. One hundred sixty-eight 1974 graduates were identified by the 10% of the Virginia agricultural education departments selected for the study. A total of eighty-two graduates responded to the questionnaire, which was designed to (1) determine the current status of high school graduates with regard to occupations, further education, economic level, and other demographic factors, (2) ascertain the perceived value of the various components of the agricultural education program by program completers, and (3) determine the reaction of program completers to recent and proposed changes in the agricultural education program. Among the findings for Virginia were that 22.0% of the graduates had gone as far as post-high school education, 54.9% had completed three years of high school agricultural education, 46.3% had belonged to the Future Farmers of America for three years, and 44.9% had had a supervised occupational experience for two years or less. In addition, the median income was $8,437.50 for Virginia graduates as compared to $11,133.37 for the ten Southern states. (The survey questionnaire is appended.) (LRA)

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THE ROLE OF HIGH SCHOOL AGRICULTURAL EDUCATION IN THE OCCUPATIONAL SUCCESS OF GRADUATES IN VIRGINIA AND TEN SOUTHERN STATES

by
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1979

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ABSTRACT

The purpose of this study was to determine the impact of agricultural education upon the occupational success of 1974 program graduates in Virginia. The results of the Virginia study were pooled with nine other Southern states. The results for Virginia and the total for all ten states are reported in the study.

The study was a descriptive study with causal-comparative or ex post facto aspects. A systematic random sample was drawn from the Virginia Agricultural Education departments. The sample consisted of 10% of the departments with every 10th department selected. The head teacher in every department selected was mailed a form to be completed with the name and address of all 1974 Agricultural Education graduates from that school. In addition to the name and address form, a cover letter co-signed by the state supervisor of Agricultural Education was sent to each head teacher. The head teachers identified 168 graduates. Of this total, 77 responded to the mail questionnaire sent to them. For the non-respondents, 10 were randomly selected for telephone follow-up calls. A total of five were contacted via telephone and completed the instrument with the aid of a project staff member.

Descriptive statistics such as means, medians, frequencies and percentages were utilized. The results for Virginia indicated that (1) 22.0% of the graduates went as far as post high school education, (2) 54.9% completed three years of high school agricultural education, (3) 46.3% belonged to the FFA for three years, (4) 44.9% had a supervised occupational experience for two years or less, and (5) the median income was $8,437.50 for Virginia graduates as compared to $11,133.33 for the 10 Southern states.

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Data displayed describing the ten Southern states were taken from the study entitled "The Role of High School Vocational Agriculture/ Agribusiness in the Occupational Success of Graduates" by Maynard J. Iverson and Ronald A. Brown.

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CHAPTER I

PURPOSES AND PROCEDURES

Introduction

The most basic purpose of vocational education has been to prepare people for the world of work. This basic purpose implies many activities that must be conducted in order to accomplish such a global purpose.

The field of Agricultural Education, since its federal legislative inception in 1917, has examined its contribution to the preparation of products for the world of work. The examination has frequently viewed the evaluation of Agricultural Education from many perspectives.

This study examined numerous aspects of Agricultural Education for 1974 graduates of the program in Virginia and in nine other southern states. Such a study not only indicates accomplishments in the field of Agricultural Education but also contributes to greater communication among professionals in the field.

Objectives

The major objective of this study was to determine the role of Agricultural Education programs, primarily at the secondary level, in the occupational success of program graduates in Virginia and in nine other states in the Southern Region.

Specifically, the study was designed to:

1. Determine the current status of high school graduates of Agricultural Education programs for the year 1974 with regard to occupation, further education, economic level and other demographic factors.

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2. Ascertain the perceived value of the various components of the Agricultural Education program as indicated by program completers.

3. Determine the reaction of program completers to recent and proposed changes in the Agricultural Education program.

Methods

Organization of the regional effort

The initial decision as to the topic for a regional research project was made at the Southern Research Conference in Agricultural Education held in Lexington, Kentucky, in July 1977. A coordinating committee was appointed whose duty was to develop procedures and give guidance to the study. Subsequent meetings were held during the National Agricultural Education Research Conference in Atlantic City in December of 1977, at the Southern Regional Conference in Agricultural Education in Lexington, Kentucky, in April of 1978, and at the Southern Research Conference in Agricultural Education in Tallahassee, Florida, in July of 1978.

As a part of these organizational meetings the Agricultural Education Program at Virginia Polytechnic Institute and State University was selected to collect data for the Commonwealth of Virginia.

The ten states participating were as follows:

Alabama
Arkansas
Florida
Georgia
Louisiana
Mississippi
North Carolina
Oklahoma
Texas
Virginia

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Virginia and the other nine participating states adhered to the following timetable.

Project Timetable

September 1, 1978	- Identification of cooperating researchers in the respective states completed.
September 14	- Cooperating researchers supplied with copies of the procedures and selected bibliography/computer search of the ERIC System (by Auburn University staff).
October 1	- Survey instrument finalized (Mississippi State University staff).
November 1	- Member schools/graduates identified by cooperating researchers.
November 15	- List of program completers developed by cooperating researchers.
December 1 (AVA)	- Cooperating researchers met after the National Agricultural Research meeting in Dallas to discuss procedures and pick up materials.
January 9, 1979	- Initial questionnaire sent out.
January 22	- Follow-up letter and questionnaire mailed.
February 5	- Telephone follow-up of non-respondents conducted.
March 1	- Returns sent to Mississippi State University for processing.
April 1	- Participant meeting at the Southern Regional Conference in Agricultural Education, Baton Rouge, LA.
June	- Computer printouts returned to the states.
	- State research reports completed.
July 1	- Regional report drafted.
July 24, 25, 26	- Southern Research Conference in Agricultural Education: reports of research - regional report finalized; decision on further studies.

Data Sources and Collection Procedures

The study was a descriptive survey with causal-comparative (ex post facto) aspects.

In order that the target population--graduates of Agricultural Education programs within Virginia and the respective states of the Southern Region--would be accurately represented, a 10 percent systematic (stratified random) sample was drawn. Every 10th department was chosen from an alphabetical listing of schools by district. The starting point was determined by random choice of the numbers 1-10. Names and addresses of graduates during the 1973-74 school year were secured from the local Agricultural Education instructors in the departments selected or, in the cases of several states, from state-level data banks. A standardized, trial-tested questionnaire was mailed to the sample, along with a cover letter and a stamped, return-addressed envelope. After ten working days, a second questionnaire, a follow-up letter and a stamped, return-addressed envelope were sent to all non-respondents. At four weeks from the initial mailing, a telephone follow-up interview of a 10 percent random sample of non-respondents was conducted to insure representativeness of the sample. The various letters and information collection instruments can be found in the Appendix.

For Virginia a total of 168 graduates from Agricultural Education programs in 1974 were identified by local teachers. Of this total, 77 returned mail questionnaires, 65 from the first mailing and 12 from the second. This gave a response rate of 45.8%. Of the remaining non-respondents ten were randomly selected and an attempt was made to contact them by telephone. A total of five were ultimately contacted by telephone.

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Once the data were collected, individual states sent their returns to Mississippi State University where data were processed by computer. Descriptive statistics such as means, medians, frequencies and percentages were used to portray respondent characteristics and opinions.

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CHAPTER II

FINDINGS

This section consists of a report of the findings of the study and interpretation of the data. Demographic data which were collected include: state, type of response (mail or telephone), age, race, educational level, years of high school courses in vocational agriculture, years of membership in the Future Farmers of America (FFA), highest degree of FFA membership received, years in the Supervised Occupational Experience (SOE) Program, years in adult/young farmer classes, residence, income, and occupational status. These data were used to gain an indepth view of the participants in the study. Frequencies and percentages are used to relate this information.

In addition to various demographic data, the respondents were asked to rate statements about their experience in vocational agriculture/agribusiness--FFA, about their teacher(s), and about the scope and function of the program. Their ratings were recorded on a 1 to 5 scale signifying opinions ranging from "strongly disagree" to "strongly agree."

Demographic Information

State Response

Data were received from 1252 respondents (graduates from high school vocational agriculture/agribusiness programs from 1974) in ten states in the Southern Region, 92.1 percent by mailed questionnaire, the remainder by interview schedule via a telephone follow-up.

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Table 1

Number and Percentage of Responses to the Southern Regional Study of Agricultural Education Graduates by States

States	Respondents			Percentage of Regional Total
	Mail	Telephone	Total N	
Alabama	90	18	108	8.6
Arkansas	37	0	37	3.0
Florida	61	0	61	4.9
Georgia	88	0	88	7.0
Louisiana	174	13	187	14.9
Mississippi	74	6	80	6.4
North Carolina	49	26	75	6.0
Oklahoma	121	11	132	10.5
Texas	382	20	402	32.1
Virginia	77	5	82	6.5
TOTAL	1153	99	1252	100.0

Age

The majority of respondents were either 22 or 23 years old. Virginia had 80.5% of its respondents in those two categories. The ten Southern states had 82.6% in the same categories. Table 2 shows a summary of the ages for the respondents.

Table 2

Ages of Respondents from Virginia and 10 States in the Southern Region

Age Categories in Years	Virginia N	Virginia %	10 States N	10 States %
21 and less	8	9.8	64	5.2
22	31	37.8	537	43.4
23	35	42.7	485	39.2
24	5	6.1	112	9.1
25 and over	3	3.7	38	3.1
TOTAL	82	100.0	1236	100.0

Sex

Both Virginia and the 10 Southern states had a large majority of males in the survey. The percentage of males was 96.3% for Virginia and 97.3% for the 10 Southern states. Table 3 displays the composition of the respondents by sex.

Table 3

Sex of Respondents from Virginia and 10 States in the Southern Region

	Virginia		10 States	
Sex	N	%	N	%
Male	79	96.3	1211	97.3
Female	3	3.7	33	2.7
TOTAL	82	100.0	1244	100.0

Race

Table 4 shows the racial makeup of the respondents. Virginia had 1.2% blacks while the 10 Southern states had 7.1% blacks in addition to 1.4% Spanish surname and 0.3% others.

Table 4

Racial Makeup of Respondents
from Virginia and 10 States
in the Southern Region

Category	Virginia N	Virginia %	10 States N	10 States %
Black	1	1.2	88	7.1
White	81	98.8	1138	91.2
Spanish Surname	0	0.0	18	1.4
Other	0	0.0	4	0.3
TOTAL	82	100.0	1248	100.0

Educational Level

Table 5 indicates that the majority of respondents have not attained more education than high school. Virginia had 22.0% continue their education beyond high school, while the 10 Southern states had 42.1% continue.

Table 5

Highest Educational Level of Respondents
from Virginia and 10 States
in the Southern Region

Educational Level (Grade)	Virginia N	Virginia %	10 States N	10 States %
11	1	1.2		
12	63	76.8	709	57.9
13	3	3.7	124	10.1
14	9	11.0	157	12.8
15	2	2.4	49	4.0
16	4	4.9	159	13.0
17	0	0.0	26	2.1
18	0	0.0	1	0.1
TOTAL	82	100.0	1225	100.0

Years in Agricultural Education

As is indicated in Table 6 the majority of Virginia respondents and the 10 state respondents completed four years of Agricultural Education courses. The percentage for Virginia was 54.9%, while the percentage for the 10 states was 55.8%. The second largest category of years completed for both was three.

Table 6

Years of High School Agricultural Education Completed by Respondents from Virginia and 10 States in the Southern Region

Years Completed	Virginia		10 States	
	N	%	N	%
Less than one year	0	0.0	14	1.1
One year	3	3.8	69	5.6
Two years	9	11.4	152	12.3
Three years	12	15.2	282	22.7
Four years	45	57.0	692	55.8
Other	10	12.7	31	2.5
TOTAL	79	100.1	1240	100.0

Membership in FFA

The largest number of Virginia respondents belonged to the FFA for four years (49.4%). The largest number of 10 state respondents also belonged to the FFA for four years (54.4%). The second largest category for Virginia was other (18.2%), while the second largest category for the 10 states was three years. Additional categories can be found in Table 7.

Table 7

Years of Membership in the FFA of Respondents from Virginia and 10 States in the Southern Region

Years of Membership	Virginia		10 States	
	N	%	N	%
Less than one	0	0.0	25	2.0
One year	4	5.2	82	6.7
Two years	9	11.7	128	10.4
Three years	12	15.6	250	20.3
Four years	38	49.4	671	54.4
Other	14	18.2	76	6.2
TOTAL	77	100.1	1232	100.0

Degree of FFA Membership

The largest number of respondents for both Virginia and the ten states indicated they had reached the Chapter Farmer level as the highest degree of membership in the FFA. The percentage was 37.8% for Virginia and 37.0% for the ten states. An unusually high number of Virginia respondents indicated they had made State Farmer as their highest degree of membership (23.2%). Other categories are displayed in Table 8.

Table 8

Highest Degree of Membership in the Future Farmers of America Achieved by Respondents from Virginia and 10 States in the Southern Region

FFA Degree	Virginia		10 States	
	N	%	N	%
None	13	15.9	274	22.3
Greenhand	15	18.3	243	19.8
Chapter Farmer Degree	31	37.8	453	37.0
State Farmer Degree	19	23.2	215	17.6
American Farmer Degree	4	4.9	41	3.3
TOTAL	82	100.0	1226	100.0

SOE Program

Table 9 indicates that the largest (28.2%) number of respondents for both Virginia and ten states in the region (25.2%) participated in supervised occupational experience (SOE) programs for four years. However, a large number of respondents indicated they had participated in the SOE program for one year or less. The percentage for Virginia was 29.5%, while for the ten states it was 35.7%.

Table 9

Years that Respondents From Virginia and 10 States in the Southern Region were Involved in Supervised Occupational Experience Programs

Years	Virginia N	Virginia %	10 States N	10 States %
Less than one year	12	15.4	266	22.7
One year	11	14.1	153	13.0
Two years	12	15.4	191	16.3
Three years	11	14.1	152	12.9
Four years	22	28.2	296	25.2
Other	10	12.8	116	9.9
TOTAL	78	100.0	1174	100.0

Involvement in Adult/Young Farmer Classes

The results displayed in Table 10 indicate the majority of respondents did not participate in either an adult or young farmer program. The percentage of non participants for Virginia was 58.6%. The percentage of non participants for the 10 states was 56.7%. Only one respondent in Virginia indicated as much as four years of participation in the adult/young farmer program since graduation five years before.

Table 10

Years that Respondents from Virginia and 10 States in the Southern Region were Involved in Adult/Young Farmer Classes in Agriculture

	Virginia		10 States	
Years	N	%	N	%
Less than one year	41	58.6	569	56.7
One year	5	7.1	74	7.4
Two years	7	10.0	48	4.8
Three years	3	4.3	20	1.9
Four years	1	1.4	55	5.5
Other	13	18.6	238	23.7
TOTAL	70	100.0	1004	100.0

Family Residence

Table 11 indicates the majority of respondents have lived on a farm or in a small town during their lifetime. Virginia had 65.9% living either on a farm or in a small town, while the 10 states had 69.2%. It appears that agricultural education still has a basically rural oriented clientele.

Table 11

Location of Family Residence Reported by Respondents from Virginia and 10 States in the Southern Region

Location	Virginia N	Virginia %	10 States N	10 States %
On a farm	49	59.8	577	46.6
In a small town	5	6.1	280	22.6
In a rural area but non-farm	26	31.7	322	26.0
In a city	2	2.4	59	4.8
TOTAL	82	100.0	1238	100.0

Income Level

Table 12 indicates that Virginia respondents had a lower gross income than respondents from 10 states in the Southern Region. The median gross income for Virginia was $8,437.50 as compared to $11,333.33 for the 10 states. The category with the largest percentage for Virginia was $5,000 to $9,999 (49.4%). The category with the largest percentage for 10 Southern Region states was $15,000 to $19,999 (31.1%).

Table 12

Annual Gross Income of Respondents From Virginia and 10 States in the Southern Region

Income Level	Virginia N	Virginia %	10 States N	10 States %
Less than $5000	13	16.0	151	12.5
$5000 - $9999	40	49.4	366	30.4
$10,000 - $14,999	19	23.4	375	31.1
$15,000 - $19,999	6	7.4	189	15.7
$20,000 - $24,999	2	2.5	67	5.6
$25,000 - $29,999	0	0.0	24	2.0
$30,000 - $34,999	0	0.0	7	0.6
Over $35,000	1	1.2	25	2.1
TOTAL	81	99.9	1204	100.0
	md=$8,437.50		md=$11,133.33	

Occupational Status

The largest category for occupation as indicated by both Virginia respondents and 10 state respondents was non-agricultural. The percentages were 54.9% and 47.4% respectively. The second largest category as indicated by Table 13 is part time farmer. Virginia had 24.4% in this category while the 10 states had 20.9%.

Table 13

Current Occupational Status of Respondents From Virginia and 10 States in the Southern Region

Occupational Categories	Virginia N*	Virginia %*	10 States N*	10 States %*
Full-time farmer or rancher	11	13.4	137	10.9
Part-time farmer or rancher	20	24.4	261	20.9
Agribusiness employee	7	8.5	106	8.5
Horticulture employee	1	1.2	29	2.3
Forestry/natural resources employee	3	3.7	39	3.1
Agricultural mechanics employee	4	4.9	98	7.8
Professional agriculture employee	2	2.4	32	2.6
Non-agricultural occupation	45	54.9	594	47.4
Attending college	3	3.7	146	11.7
Unemployed	3	3.7	57	4.6
Self-employed, agriculture	8	9.8	130	10.4
Self-employed, non-agriculture	4	4.9	121	9.7

*Note: Numbers and percentages exceed the total samples since some respondents were represented in more than one occupational category.

Ratings of Agricultural Education/Agribusiness--FFA

Table 14 indicates that graduates were generally pleased with the Agricultural Education program. The respondents gave the highest rating to the statement, "Were such that if I had to do it over, I would enroll in Vocational Agriculture/Agribusiness--FFA again." The statement received a mean rating of 4.65 for Virginia and 4.59 for the 10 states. The scale utilized was 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree and 5 = strongly agree.

The second highest rating for Virginia was given to the statement, "Helped me learn how to participate in meetings." The Virginia rating was 4.18, while the 10 state rating was 4.09.

The lowest rating was for the statement, "(Experiences in Agricultural Education/Agribusiness--FFA) were of no benefit to me." This statement received a rating of 1.48 from Virginia respondents and 1.52 from the 10 state respondents.

Table 14

Ratings of Statements About the Agricultural Education/Agribusiness Program by Respondents From Virginia and 10 States in the Southern Region

Statements About Agricultural Education/ Agribusiness Experiences	Virginia Means*	10 State Means*
Were such that if I had it to do over, I would enroll in Agricultural Education/ Agribusiness--FFA again	4.65	4.59
Helped me learn how to participate in meetings	4.18	4.09
Were good for me	4.16	4.32
Taught me skills useful in an agricultural career	4.12	4.17
Helped me learn how to get along with other people	4.07	4.10
Helped me develop leadership skills	4.04	4.07
Helped me learn how to work	3.98	4.06
Taught me skills useful in a non-agricultural career	3.75	3.79
Helped me to stay in school	3.50	3.32
Helped me to enter and advance in a non-agricultural career	3.10	3.03
Helped me to choose an occupation	3.06	3.17
Helped me to enter and advance in an agricultural career	2.80	2.96
Encouraged me to go to college	2.61	3.04
Were of no benefit to me	1.48	1.52

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree.

Teacher Assistance

Table 15 indicates that both Virginia and 10 state respondents modestly agreed their agricultural teachers had given them encouragement to enter either agricultural careers or careers outside of agriculture. Virginia respondents rated both areas as a 3.53. Respondents from the 10 states rated encouragement to enter an agricultural occupation as 3.48, while they rated information on careers outside of agriculture as 3.41. Both statements used a rating scale of 1 to 5, with 5 as the most favorable.

Table 15

Ratings of Statements About Teacher Assistance in the Agricultural Education/Agribusiness Program by Respondents From Virginia and 10 States in the Southern Region

Statements About Teacher Assistance	Virginia Means*	10 State Means*
Encouraged me to enter an occupation in agriculture	3.53	3.48
Provided me with information on careers outside agriculture	3.53	3.41
Encouraged me to major in agriculture in college	2.87	3.01

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree.

Functions of Agricultural Education

Both Virginia respondents and the 10 state respondents gave their highest rating to the statement "(Agricultural Education) Should include laboratory instruction." Virginia respondents rated the statement as 4.46, while the 10 state respondents rated it as 4.42. The statement that received the lowest rating was "(Agricultural Education) Should emphasize only farm in its instruction." Virginia respondents rated the statement as 1.86, while the 10 state respondents rated it as 1.88. Both statements used a rating scale of 1 to 5, with 5 as the most favorable. Table 16 indicates the ratings of other statements covering the functions of Agricultural Education.

Table 16

Ratings of Statements Regarding Functions of Agricultural Education/Agribusiness by Respondents from Virginia and 10 States from the Southern Region

Statements Regarding Functions	Virginia Means*	10 State Means*
Should include laboratory instruction	4.46	4.42
Should include supervised occupational experience in agriculture	4.35	4.41
Should include FFA activities	4.28	4.33
Should include agriculture/agribusiness instruction for adults	4.26	4.27
Should have teachers available year-round	4.25	4.37
Is useful to farmers in the community	4.22	4.24
Is useful to agribusiness persons in the community	4.18	4.18
Should emphasize farming and agribusiness in its instruction	4.15	4.10
Should emphasize only farm in its instruction	1.86	1.88

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree.

Comparison of Four Year and Three Year FFA Members' Ratings on Statements

Table 17 indicates some differences in the rating of the total program by four year and three year FFA members. For the 14 statements the four year members had more favorable ratings on all but one. The one statement which the three year members rated more highly was "(Agricultural Education-FFA) taught me skills useful in a non-agricultural career." Of the 13 statements rated more favorably by the four year members the greatest difference (0.71) occurred for the statement "(Agricultural Education-FFA) encouraged me to go to college."

Table 17

Comparison of Mean Ratings of the Virginia Agricultural Education-FFA Program by Four and Three Year FFA Members

Statement	4 Years n = 38	3 Years n = 12	Difference 4 yr - 3 yr
Helped me learn how to work	4.00*	3.92*	.08
Taught me skills useful in an agricultural career	4.11	4.08	.03
Taught me skills useful in a non-agricultural career	3.63	3.92	-.29
Helped me to choose an occupation	3.26	2.67	.59
Helped me to enter and advance in an agricultural occupation	2.92	2.75	.17
Helped me to enter and advance in a non-agricultural occupation	3.21	2.92	.29
Helped me to learn how to get along with other people	4.16	4.00	.16
Helped me develop leadership skills	4.18	4.00	.18
Helped me learn how to participate in meetings	4.24	4.17	.07
Helped me to stay in school	3.68	3.17	.51
Encouraged me to go to college	2.71	2.00	.71
Were good for me	4.08	3.75	.33
Were of no benefit to me	1.53	2.18	.65
Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness - FFA again	4.63	4.58	.05

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree

Comparison of Four Year and Three Year Enrollee Ratings on Statements

Table 18 indicates that of the 14 statements rated by graduates enrolled for either four or three years in Agricultural Education, eleven were rated more highly by the four year enrollees. The greatest difference (0.77) in rating occurred for the statement "(Agricultural Education-FFA) Encouraged me to go to college."

Table 18

Comparison of Mean Ratings of the Virginia Agricultural Education-FFA Program by Graduates who were enrolled in Agricultural Education for Four and Three Years

Statement	4 Years n = 45	3 Years n = 12	Difference 4 yr - 3 yr
Helped me learn how to work	3.93*	4.01*	-.08
Taught me skills useful in an agricultural career	4.07	4.25	-.18
Taught me skills useful in a non-agricultural career	3.80	3.83	-.03
Helped me to choose an occupation	3.21	2.75	.46
Helped me to enter and advance in an agricultural occupation	2.86	2.83	.03
Helped me to enter and advance in a non-agricultural occupation	3.21	2.83	.38
Helped me to learn how to get along with other people	4.16	4.00	.16
Helped me develop leadership skills	4.21	3.92	.29
Helped me learn how to participate in meetings	4.25	4.08	.17
Helped me to stay in school	3.60	3.25	.35
Encouraged me to go to college	2.77	2.00	.77
Were good for me	4.18	3.58	.60
Were of no benefit to me	1.50	2.09	.59
Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness - FFA again	4.68	4.50	.18

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree

Comparison of Four Year and Three Year FFA Members' Ratings on Functions

Table 19 indicates that Virginia students who belonged to the FFA for four years rated eight out of nine statements concerning the functions of Agricultural Education-FFA more favorably than did three year members. The two statements with the greatest differences were "Should include... FFA Activities" (0.35 higher) and "Should have teachers available year-round" (0.34 higher).

Table 19

Comparison of Mean Ratings of Statements Regarding Functions of the Virginia Agricultural Education Program by Four and Three Year FFA Members

Statement	4 Years n = 38	3 Years n = 12	Difference 4 yr - 3 yr
Should emphasize only farming in its instruction	1.89*	2.00*	-.11
Should emphasize farming and agribusiness in its instruction	4.14	4.16	.02
Is useful to farmers in the community	4.31	4.18	.13
Is useful to agribusiness persons in the community	4.24	4.17	.07
Should include, along with other instruction:			
FFA activities	4.35	4.00	.35
Supervised occupational experience in agriculture (work experience) for students	4.38	4.25	.13
Laboratory instruction (shop, greenhouse, forestry plots)	4.60	4.33	.27
Agriculture/agribusiness instruction for adults with career interests in agriculture	4.27	4.17	.10
Should have teachers available year-round	4.34	4.00	.34

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree

Comparison of Four Year and Three Year Enrollee Ratings on Functions

Table 20 indicates that Virginia students enrolled in Agricultural Education for four years rated three statements about functions higher than three year enrollees. Two of the three statements were "Should include, ...FFA Activities" and "Should have teachers available year-round." Both statements were rated 0.24 higher by the four year enrollees. It is also interesting to note that both statements were the same as rated with the greatest by the four year FFA members as compared to three year FFA members. The students enrolled in Agricultural Education for three years rated six of the nine statements higher than the four year enrollees.

Table 20

Comparison of Mean Ratings of Statements Regarding Functions of the Virginia Agricultural Education Programs by Graduates who were enrolled in Agricultural Education for Four and Three Years

Statement	4 Years n = 45	3 Years n = 12	Difference 4 yr - 3 yr
Should emphasize only farming in its instruction	1.88*	1.92*	-.04
Should emphasize farming and agribusiness in its instruction	4.14	4.33	-.19
Is useful to farmers in the community	4.27	4.17	.10
Is useful to agribusiness persons in the community	4.23	4.25	-.02
Should include, along with other instruction:			
FFA activities	4.32	4.08	.24
Supervised occupational experience in agriculture (work experience) for students	4.35	4.42	-.07
Laboratory instruction (shop, greenhouse, forestry plots)	4.40	4.50	-.10
Agriculture/agribusiness instruction for adults with career interests in agriculture	4.23	4.33	-.10
Should have teachers available year-round	4.33	4.09	.24

*Means were calculated on the basis of 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree

CHAPTER III

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The major purpose of this study was to determine and report the impact of Agricultural Education upon the occupational success of 1974 program graduates in Virginia and nine other Southern states. A descriptive study was conducted which was basically causal-comparative with some ex post facto aspects.

The major objectives for the study were as follows:

1. Determine the current status of high school graduates of Agricultural Education programs for the year 1974 with regard to occupation, further education, economic level and other demographic factors.

2. Ascertain the perceived value of the various components of the Agricultural Education program by program completers.

3. Determine the reaction of program completers to recent and proposed changes in the Agricultural Education program.

A stratified random sampling technique which selected every tenth high school Agricultural Education department in Virginia was utilized. The head teacher for each department selected was sent a cover letter requesting him or her to complete an enclosed form with the names and addresses of agricultural students who graduated from their school in 1974.

The teachers identified 168 graduates. For this sample of 168, a total of 77 returned completed questionnaires. An additional five respondents were contacted for a telephone interview.

The questionnaire used for this study was developed as a result of a joint effort on the part of representatives for all ten states participating in the Southern region study.

Results of the study for Virginia indicated that:

1. Slightly over three percent of the respondents were female, while 1.2% were black.

2. Twenty two percent of the respondents had continued on for some form of postsecondary education.

3. A majority of the respondents (57.0%) had completed four years of agriculture.

4. Forty nine percent had belonged to the FFA for four years.

5. Twenty eight percent had supervised occupational experience programs for four years.

6. Over half (59.8%) of the respondents lived on a farm.

7. The median income for the respondents was $8,437.50.

8. The largest occupational status was non-agricultural with 54.9%.

9. The respondents were generally pleased with the Agricultural Education program indicating a 4.65 rating (on a 5 point scale) for the statement "Were such that if I had to do it over, I would enroll...again."

10. Students who were enrolled in Agricultural Education for four years and students who belonged to the FFA for four years consistently rated statements about the total program higher than those who participated for three years.

Conclusions and Recommendations

Based upon the results of this study the following conclusions and recommendations for Virginia have been developed:

1. An inadequate number of females and blacks were being served. While the number served has increased since 1974, it undoubtedly needs to continue increasing until the number being served more closely resembles the percentage in the population.

2. A greater effort must be made to increase the percentage of Agricultural Education students who belong to the FFA. With only 49.4% of the students belonging for four years and only an additional 15.6% belonging for three years, more members need to be recruited. With students who belong to the FFA for four years indicating they have a higher opinion of the total

program than students who belong for three years, it is important to not only recruit, but to also retain members in the FFA.

3. More students need a supervised occupational experience program for the length of the time they are enrolled in Agricultural Education. A total of 15.4% indicated they did not have a supervised occupational experience program, while only 28.2% indicated they had one for four years. Both figures are slightly better than the experiences indicated by the 10 states. However, additional work in this area needs to be done by Virginia Agricultural Education teachers.

4. With 59.8% of the graduates living on a farm plus an additional 37.8% living in either a small town or a rural area, only 2.4% were left to live in a city. Certainly a larger percentage of urban dwellers needs to be served by the Agricultural Education program.

5. With the largest single occupational area the graduates have chosen to pursue being non-agricultural, the Agricultural Education program must be careful in reporting success of graduates. Caution must be used to prevent such narrow reportings as specific occupations within the field of agriculture. The success of the program should be measured by the product's ability to get, hold and advance in an occupation. The skills developed in the program may be directly or indirectly related to the occupation pursued. However, the contribution to that product's success, whether direct or indirect, should be recognized.

6. With students who participated in the program for four years rating their experiences more favorably than students who participated three years, especially from the perspective of FFA membership, it is important to involve students in the program as soon as possible. For many school divisions this involvement should begin in junior high school or late elementary school.

7. Agricultural Education programs in all fifty states need to do a similar study. The results can be used as benchmarks for the development of total programs. Other states should attempt to pool data gathered in the form of a regional report permitting interesting comparisons as well as efficiency of management.

APPENDICES

APPENDIX A

Cover letter and questionnaire
sent to 1974 graduates

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

January 5, 1979

You have been identified as a former student in Agricultural Education and as a person who would be willing to help improve the program throughout the State.

We are working together with other states in the Southeast to collect information about Agricultural Education from a small sample of former students like yourself.

Your opinions are essential in this research since such information cannot be obtained elsewhere. Please take a few minutes to complete the enclosed questionnaire. A stamped, return-addressed envelope is included for your convenience. May we hear from you this week?

Thank you in advance for your cooperation.

Sincerely,

John Hillison
Agricultural Education
VPI & SU

JH/ds

Enclosure

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Columns (1-10)

For Office Use Only

FOLLOW-UP SURVEY OF FORMER VOCATIONAL AGRICULTURE/AGRIBUSINESS STUDENTS

Instructions: Please read each statement and respond as indicated. Check only one item under each heading unless otherwise instructed. Your individual answers will be kept confidential.

I. General Information

(11,12) A. Age (in years) _____

(13) B. Sex
( ) 1. Male
( ) 2. Female

(14) C. Race
( ) 1. Black
( ) 2. White
( ) 3. Spanish surname
( ) 4. Other, please specify _____

(15,16) D. Educational Level (circle highest grade completed)

8 9 10 11 12 (High School) 13 14 15 16 17 (College)

(17) E. Years of High School Courses in Vocational Agriculture
( ) 1. Less than one year
( ) 2. One year
( ) 3. Two years
( ) 4. Three years
( ) 5. Four years
( ) 6. Other (please specify) _____

(18) F. Years of Membership in the Future Farmers of America (FFA)
( ) 1. Less than one year
( ) 2. One year
( ) 3. Two years
( ) 4. Three years
( ) 5. Four years
( ) 6. Other (please specify) _____

(19) G. Highest Degree of Membership That You Received
( ) 1. None
( ) 2. Greenhand degree
( ) 3. Chapter Farmer degree
( ) 4. State Farmer degree
( ) 5. American Farmer degree

(20) H. Years you were involved in the Supervised Occupational Experience Program in Vocational Agriculture (also called summer projects, part-time work in agriculture, supervised farming programs, off-farm placement, co-op programs, supervised work experience in agriculture, etc.)
( ) 1. Less than one year
( ) 2. One year
( ) 3. Two years
( ) 4. Three years
( ) 5. Four years
( ) 6. Other (please specify) _____

(21) I. Years in Adult/Young Farmer Classes in Agriculture (evening, or continuing education classes)
( ) 1. Less than one year
( ) 2. One year
( ) 3. Two years
( ) 4. Three years
( ) 5. Four years
( ) 6. Other (please specify) _____

(22) J. Where You Lived Most of Your Life
( ) 1. On a farm
( ) 2. In a rural area but not a farm
( ) 3. In a small town
( ) 4. In a city

(23) K. Annual Gross Income - before taxes (will be strictly confidential)
( ) 1. Less than $5,000
( ) 2. $5,000 - $9,999
( ) 3. $10,000 - $14,999
( ) 4. $15,000 - $19,999
( ) 5. $20,000 - $24,999
( ) 6. $25,000 - $29,999
( ) 7. $30,000 - $34,999
( ) 8. Over $35,000

(OVER)

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I. Current Occupational Status (answer as many as apply)

(24) ( ) 1. Full-time farmer or rancher.
(25) ( ) 2. Part-time farmer or rancher (estimate the percentage of time devoted to farming or ranching: _____%).
(26) ( ) 3. Agribusiness employee (examples: farm machinery parts clerk, duster pilot, chemical salesperson, feed mill employee, meat inspector, etc.) Please name your occupation_____
(27) ( ) 4. Horticulture employee (examples: greenhouse worker, retail florist worker or owner, garden center employee, etc.) Please name your occupation_____
(28) ( ) 5. Forestry/Natural resources employee (examples: logger, forest cruiser, park employee, wildlife conservation officer, etc.) Please name your occupation_____
(29) ( ) 6. Agricultural mechanics employee (examples: farm machinery mechanic, farm machinery mechanic's helper, welder, etc.) Please name your occupation_____
(30) ( ) 7. Professional agricultural employee (examples: vocational agriculture teacher, extension agent, veterinarian, etc.) Please name your occupation_____
(31) ( ) 8. Non-agricultural occupation (examples: military service, textile worker, banker, etc.) Please name your occupation_____
(32) ( ) 9. Currently attending college (major_____)
(33) ( ) 10. Currently unemployed (please give reason_____)
(34) ( ) 11. Self-employed in agriculture (on or off farm).
(35) ( ) 12. Self-employed in an occupation not related to agriculture.

II. Opinions of Your Vocational Agriculture/Agribusiness Experience in High School

Instructions: Please give your opinion about each of the following statements. If you strongly disagree, circle "1"; if you disagree, circle "2"; if you are undecided or do not know, circle "3"; if you agree, circle "4"; if you strongly agree, circle "5".

		Strongly Disagree SD	Disagree D	Undecided U	Agree A	Strongly Agree SA
	A. My Experiences in Vocational Agriculture/Agribusiness - FFA:					
(36)	1. Helped me learn how to work.	1	2	3	4	5
(37)	2. Taught me skills useful in an agricultural career.	1	2	3	4	5
(38)	3. Taught me skills useful in a non-agricultural career	1	2	3	4	5
(39)	4. Helped me to choose an occupation.	1	2	3	4	5
(40)	5. Helped me to enter and advance in an agricultural occupation .	1	2	3	4	5
(41)	6. Helped me to enter and advance in a non-agricultural occupation	1	2	3	4	5
(42)	7. Helped me to learn how to get along with other people.	1	2	3	4	5
(43)	8. Helped me develop leadership skills.	1	2	3	4	5
(44)	9. Helped me learn how to participate in meetings	1	2	3	4	5
(45)	10. Helped me to stay in school.	1	2	3	4	5
(46)	11. Encouraged me to go to college	1	2	3	4	5
(47)	12. Were good for me	1	2	3	4	5
(48)	13. Were of no benefit to me	1	2	3	4	5
(49)	14. Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness - FFA again.	1	2	3	4	5
	B. My Teacher(s) in Vocational Agriculture/Agribusiness - FFA:					
(50)	1. Encouraged me to enter an occupation in agriculture.	1	2	3	4	5
(51)	2. Encouraged me to major in agriculture in college	1	2	3	4	5
(52)	3. Provided me with information on careers outside Ag	1	2	3	4	5
	C. In My Opinion The Vocational Agriculture/Agribusiness - FFA Program:					
(53)	1. Should emphasize only farming in its instruction	1	2	3	4	5
(54)	2. Should emphasize farming and agribusiness in its instruction .	1	2	3	4	5
(55)	3. Is useful to farmers in the community.	1	2	3	4	5
(56)	4. Is useful to agribusiness persons in the community	1	2	3	4	5
	5. Should include, along with other instruction:					
(57)	a. FFA activities.	1	2	3	4	5
(58)	b. Supervised occupational experience in agriculture (work experience) for students.	1	2	3	4	5
(59)	c. Laboratory instruction (shop, greenhouse, forestry plots)	1	2	3	4	5
(60)	d. Agriculture/agribusiness instruction for adults with career interests in agriculture.	1	2	3	4	5
(61)	6. Should have teachers available year-round (including the summer) to help farmers and other agricultural employees, vocational agriculture/agribusiness students, and FFA members with problems associated with agriculture	1	2	3	4	5

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APPENDIX B

Cover letter and Survey Form Sent
to Agricultural Education Teachers

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COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

The Commonwealth of Virginia is in the process of collecting information concerning graduates of high school agricultural education programs. This effort is part of a Southern Regional study to be completed during the current school year.

We would like the names and current addresses of graduates from your agricultural education program for the school year 1974. If you do not know the current address of a graduate we would like to know his or her parent's current address.

There are a number of sources that can be helpful while finding both names and addresses. The departmental files should assist you. Your present seniors should be helpful. The high school's 1974 yearbook could also be helpful.

If you prefer one of your more responsible students could complete the enclosed form or a departmental part-time secretary, under your supervision, could also complete it.

We consider this to be a most important study. We also want Virginia to be represented in the final results. Most importantly, we very much appreciate your help and cooperation.

Sincerely,

John Hillison

John Hillison
Associate Professor
Agricultural Education
VPI&SU

Julian Campbell

Julian Campbell
Supervisor
Agricultural Education
Virginia Department of Education

JH:JC/sw

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1974 Graduates
Agricultural Education

_____ High School

Graduate's Name _____

☐ Graduate's Current _____
Address _____

☐ Parent's Current _____
Address _____

Graduate's Name _____

☐ Graduate's Current _____
Address _____

☐ Parent's Current _____
Address _____

Graduate's Name _____

☐ Graduate's Current _____
Address _____

☐ Parent's Current _____
Address _____

Graduate's Name _____

☐ Graduate's Current _____
Address _____

☐ Parent's Current _____
Address _____

Graduate's Name _____

☐ Graduate's Current _____
Address _____

☐ Parent's Current _____
Address _____

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APPENDIX C

Virginia Teachers and Agricultural Education Departments Responding to Questionnaire

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Virginia Teacher Respondents and Schools

Mr. Harry Lee Strouth
Clintwood High School
Clintwood, VA 24228

Mr. William P. St. John
Chilhowie High School
Chilhowie, VA 24319

Mr. Phil McCroskey
John S. Battle High School
Bristol, VA 24201

Mr. K. W. Phillips
Floyd County High School
Floyd, VA 24091

Mr. A. B. Culbertson
Gretna Senior High School
Gretna, VA 24557

Mr. James Mason
Charles City County High School
Ruthville, VA 23147

Mr. Edward Finks
King George High School
King George, VA 22845

Mr. B. W. Roller
Strasburg High School
Strasburg, VA 22657

Mr. Robert E. Taylor
Orange County High School
Orange, VA 22960

Mr. Martin Bess
Smithfield High School
Smithfield, VA 23430

Mr. John Downing
Northampton High School
Eastville, VA 23347

Mr. Charles Blackwell
John Yeates High School
Suffolk, VA 23435

Mr. D. R. Shiflett
Riverheads High School
Staunton, VA 24401

Mr. W. A. Gutshall
Highland High School
Monterey, VA 24465

Mr. D. M. Smith
Broadway High School
Broadway, VA 22815

Mr. L. E. Williamson, Jr.
Nottoway Senior High School
Crewe, VA 23930

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